AUSTRALIAN ENTOMOLOGICAL SOCIETY

NEWS BULLETIN

Volume 9, Part 3, August 1973

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AUSTRALIAN ENTOMOLOGICAL SOCIETY

NEWS BULLETIN, VOLUME 9 PART 3, AUGUST 1973

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Articles, Notes, Letters to the Editor and other material for the News Bulletin should be sent to the News Bulletin Editor, or to your Regional Councillor.

EXECUTIVE REPORT

MEETINGS:

The Executive met on 12 June, 2 July and 2 August.

MEMBERSHIP:

Since the last report another 9 members have been elected, and the Society now has 480 members, distributed geographically as follows:

N.S.W.	101	Vic.	64	Tas.	22
Qld.	99	S.A.	30	W.A.	20
A.C.T.	80	P.N.G.	22	N.T.	4

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CHANGE OF TREASURER:

Mr. R.T.G. Greaves resigned as Treasurer of the Society in July, owing to increased pressure of work from a major forestry conference that he is organising. Ron became Treasurer in 1969 when the Executive transferred from Brisbane to Canberra, and he has handled the Society's accounts quietly and efficiently since then. During this time membership has increased greatly, with a consequent increase in work for the Treasurer, and in 1972 the International Congress of Entomology also involved the Society in many extra financial transactions. On behalf of all members we thank Ron for filling this demanding office so well during the last four years.

After a ballot of Councillors in July Dr. Roger Kitching became the Society's new Treasurer, and we welcome him to this appointment. Please note that all correspondence for the Treasurer should now be addressed to: Dr. R.L. Kitching, Division of Entomology, CSIRO, P.O. Box 1700, Canberra City, A.C.T. 2601.

Several Councillors have resigned with effect from the 6 AGM, and new nominations for these positions will be considered at that meeting. It is hoped that the new names can be included in the list of officers at the front of this Bulletin, and a formal announcement of their appointment will appear in the Executive Report in the next Bulletin.

PAYMENT OF SUBSCRIPTIONS:

The Treasurer has been put to some inconvenience by certain methods of payment of subscriptions, and would be grateful if members would please note the following points. Cheques are the most convenient method of payment, but if you do not have a cheque account please send a *crossed postal order* rather than a money order. Postal orders can be paid into the Society's bank account, whereas money orders have to be cashed at the post office specified on the order. As this is usually "Canberra", the Treasurer has to make a long and inconvenient trek each time to the G.P.O. near Parliament House.

Overseas subscriptions remitted in foreign currencies frequently do not convert to the correct Australian sum, causing much inconvenience when the amount is divided between the Society's several accounts. Some recent subscriptions have also been affected by currency revaluations while in the mail. It is very much in the interest of both parties if you ask your bank to issue a bank draft in Australian dollars payable to the Australian Entomological Society. The Society then receives the correct sum, and your bank account is billed for the equivalent in local currency at the prevailing rate of exchange. This form of payment is not subject to change through revaluation while it is in transit.

NEW MEMBERS

We are pleased to welcome the following new members:

Elected 12.6.73

Mr. D.E.A. Morton, M.C.E.G.S., Domain Road, South Yarra, Victoria, 3141. Mr. Morton is a schoolmaster, and has been an amateur collector of Lepidoptera for some years.

Dr. G.R. Johnstone, c/- New Town Research Laboratories, Box 192 B, G.P.O. Hobart, Tas. 7001. Dr. Johnstone works for the Tasmanian Department of Agriculture on vectors of plant viruses.

Elected 2.8.73

Dr. T.M. Beattie, c/- Department of Zoology, La Trobe University, Bundoora, Vic. 3083. Dr. Beattie is a Research Fellow in the Department, working in the field of insect physiology. He has published papers on the histology, histochemistry and ultrastructure of neurosecretory tissues in insects.

Mr. C.G. Beck, 28 Oxford Street, Hillcrest, S.A. 5086. Mr. Beck is a Technical Officer (Laboratory), and is particularly interested in the study and collection of Diptera and Hymenoptera.

Mr. D.W. de Little, c/- Faculty of Agricultural Science, University of Tasmania, Box 252 C, G.P.O., Hobart, Tas. 7001. Mr. de Little is a postgraduate research student in the Department, studying the biology and ecology of the Paropsini (Coleoptera:Chrysomelidae).

Mr. R.P. Field, Victorian Plant Research Institute, Swan Street, Burnley, Vic. 3121. Mr. Field has been an Entomologist with the Victorian Department of Agriculture for the past 18 months, and has for 10 years been collecting Australian butterflies, especially Hesperioidea and Papilionoidea.

Mr. J.C. Herremans, Flat 3, 38 Colin Street, Lakemba, N.S.W. 2195. Mr. Herremans is a Supervisor, and has a general interest in entomology, excluding Lepidoptera and Hymenoptera.

Mr. J. Ireson, 234 Nelson Road, Mount Nelson, Tas. 7007. Mr. Ireson has been an Entomologist with the Tasmanian Department of Agriculture for the past 18 months, working on light brown apple moth.

Mr. D. Tough, Biological & Chemical Research Institute, P.M.B. 10, Rydalmere, N.S.W. 2116. Mr. Tough is an Entomologist with the New South Wales Department of Agriculture, working on citrus pests. His particular interests are integrated control of red scale, control of larvae of Lepidoptera and Diptera in fruit, and insecticide bioassay of *Dacus tryoni*.

CHANGES OF ADDRESS AND TITLE

(State of previous residence shown in brackets)

Mr. A.F. Atkins, Flat 2, 107 Menzies Street, Kawana, Rockhampton, Qld. 4701. (Qld.)

Dr. B.R. Champ, Division of Entomology, CSIRO, P.O. Box 1700, Canberra City, A.C.T. 2601. (Qld.)

Mrs. A.D. Chapman, 16 Mallee Street, Condon, Qld. 4815 (Qld.)

Dr. A.D. Clift, Biological & Chemical Research Institute, P.M.B. 10, Rydalmere, N.S.W. 2116. (N.S.W.)

Dr. B.A. Conroy, Department of Biological Science, University of Newcastle, N.S.W. 2308. (Qld.; change of title)

Prof. H.E. Evans, Department of Zoology & Entomology, Colorado State University, Fort Collins, Colo. 80521, U.S.A. (overseas).

Mr. J.T. Hamilton, 9C/29 Quirk Road, Manly Vale, N.S.W. 2093. (N.S.W.)

Mr. J.A. Harris, Box 231, Healesville, Vic. 3777. (Vic.)

Mr. G.W. Howard, Department of Zoology, University of Zambia, P.O. Box 2379, Lusaka, Zambia. (S.A.)

Dr. A. Macqueen, Long Pocket Laboratories, CSIRO, Private Mail Bag No. 3, Indooroopilly, Qld. 4068. (overseas; change of title)

Mr. A. McKenzie, 1 Shirley Avenue, Punchbowl, N.S.W. 2196. (N.S.W.)

Dr. I.S. Misko, John Curtin School of Medical Research, Australian National University, P.O. Box 334, Canberra City, A.C.T. 2601. (A.C.T.; change of title)

Mr. K.M. Moore, Prospect Street, Statue Bay, Yeppoon, Qld. 4703. (N.S.W.)

Mr. B.S. Robinson, 51 Finniss Street, North Adelaide, S.A. 5006. (S.A.)

Dr. P.M. Room, Entomology Section, D.A.S.F., Bubia, via Lae, P.N.G. (P.N.G.)

Mr. B. Unwin, 23 Pine Avenue, Campbelltown, N.S.W. 2560. (N.S.W.)

Mr. C.H. Wild, c/- Department of Entomology, University of Queensland, St.Lucia, Qld. 4067. (Vic.)

ENTOMOLOGICAL NEWS AROUND AUSTRALIA

WESTERN AUSTRALIA:

Biological Control of Fruit Tree Pests

Two introductions, one of a parasite and the other of a predator, have been made in W.A. during the last six months, with the assistance of CSIRO, for control of a citrus scale and apple red spider.

Citrus growers in the Darling Range south of Perth are periodically concerned by outbreaks of white wax scale, *Gascardia destructor*, which can be particularly troublesome to grapefruit, oranges and mandarins. Recently small consignments of parasitic wasps, *Anicetus communis* (family Encyrtidae), received from the CSIRO Biological Control Station, Sydney, were released in a local orchard. The parasite, which has also been released in New South Wales, is of South African origin.

A common pest of fruit trees during summer is the two-spotted mite, *Tetranychus urticae*. A predatory phytoseiid mite, *Typhlodromus occidentalis*, which originated in North America, was supplied by CSIRO and released in a local apple orchard. It appears to have become established and has the attribute of being organophosphorus- resistant, so that should miticides be required to overcome an uncontrolled mite outbreak, the predator will survive to control smaller outbreaks.

The progress of these introductions will be watched with interest.

S.J. Curry

SOUTH AUSTRALIA:

Waite Agricultural Research Institute

Professor T.O. Browning recently visited Nairobi, Kenya, where he attended the yearly conference of Research Directors of the International Centre of Insect Physiology and Ecology. Another purpose of his visit there was to arrange for the setting up of a research project on ticks, which he supervises in conjunction with Professor Rachel Galun, an insect physiologist from Israel. In the course of his travels Professor Browning also visited agricultural centres in Mauritius, London and India. He returned to Adelaide on 11 August.

A research project aimed at investigating the Sudden Infant Death Syndrome has been set up, and Dr. F.D. Morgan is on the research executive committee for the purpose of designing, co-ordinating and supervising the study. A grant of $5000 has been made available to the Waite Institute by the State Government in order to finance the Housedust Mite section of the programme. Mr. D. Hopkins of the Entomology Department will be involved in the research.

Mr. M.Z.A. Khan from the Bangladesh Atomic Energy Commission recently arrived at the Institute to study for a higher degree in the Department of Entomology.

The Council of the University of Adelaide has awarded the degree of Ph.D. to Mr. M.U. Mallik, now of Dacca, Bangladesh.

Dr. H.J. Banks from the Entomology Division, CSIRO, Canberra, visited the Entomology Department during the week commencing 16 July in connection with his "sideline" interest in insect pigments and taxonomy. Dr. Banks' main field of interest lies in research on insect pests of stored grain.

South Australian Museum

In the first half of the year Gordon Gross spent three weeks on three separate excursions to the Murray River trench between Morgan and Nildottie, the first of a series of trips (to be continued later in the year when the weather improves) called the Murray Drift Down Series. These are a co-operative effort between the Museum curators and an army unit from Port Wakefield, the latter providing the boats to travel and collect along the length of the River Murray from Morgan to the sea.

This project is to judge areas likely to be adversely affected by the population of the proposed new city of Monarto, just west of Murray Bridge, as the inhabitants come to scour a fairly uninteresting area of plain in search of recreation and amusement. Apart from recommendations to preserve areas of biological and scenic interest the trips have brought in a lot of good material for the collections.

Eric Matthews spent 15 days in the Northern Territory, in the Alligator Rivers proposed national park area, accompanying the second (post-wet) CSIRO insect survey of the area from 19 May to 2 June. His responsibility was the collection of beetles. These proved to be extraordinarily elusive during the daytime, and standard collecting techniques yielded very little. On the other hand, at nightfall and thereafter an enormous number and variety of (generally small) beetles came to light, often blackening the light sheet and crawling under the clothing of the collector.

At the invitation of Dr. H. Heatwole, general editor of the Australian Ecology Series being prepared for publication by Angus and Robertson, Eric Matthews is writing a book on the adaptations of insects to various Australian environments. This should appear early in 1974.

The Museum staff were privileged to have Dr. J.C.M. Carvalho working with them for several weeks in March and April. He and Gordon Gross sorted out the Museum's collection of Miridae to subfamily, tribe, genus and sometimes to species, in preparation for a series of joint papers to be started towards the end of the year on the taxonomy of the Australian members of this important family of Heteroptera.

P.G. Allen

TASMANIA:

A meeting was held on Thursday 21 June at which Mr. David de Little spoke on "An Introduction to the Eucalyptus defoliating paropsines". Although the meeting was not well attended, the interesting talk was followed by lively discussion. The subject of eucalypt defoliation is becoming increasingly important in Tasmania. David is a postgraduate student in the Faculty of Agriculture and has recently been elected to membership of the Society.

A meeting was also held on 2 August, for which Notes and Exhibits were invited. Unfortunately only five members and one visitor attended, but apologies were received from four others. Bob Hardy, although he was unable to attend the meeting, exhibited adults and larvae of four common pasture scarabs of Tasmania, with two of their natural enemies - a thynnid and a tachinid. Keith Taylor showed slides and specimens of a range of lerp insects. A similar meeting will be arranged during the summer when more material is likely to be available.

The Tasmanian Department of Agriculture conducted an in-service training course dealing with "Ecological Principles and Approaches" for four days during May. The course included lectures by three members of the Society. Lectures and practical work on Inter-Species Relationships were provided by Dr. J.L. Madden, (University of Tasmania); Professor T.O. Browning (University of Adelaide) spoke about Intra-Population Processes, and Dr. P.S. Lake (University of Tasmania) dealt with the Concept of Limiting Factors and the Ecological Niche.

Miss Margaret Stephenson, formerly of Queensland and now an entomologist in the Tasmanian Department of Agriculture, is to marry Mr. R. Williams of Hobart in August.

Dr. John Madden, Faculty of Agriculture, University of Tasmania, would be glad to receive specimens (in quantity) of common insects from mainland Australia for teaching purposes. Large species like the Australian plague locust would be particularly useful.

K.L. Taylor

AUSTRALIAN CAPITAL TERRITORY:

CSIRO Division of Entomology

Dr. B.R. Champ, who has been working overseas for more than a year, returns to Australia on 13 August and moves to Canberra to join the Division's Grain Storage Section. He will be continuing his work on insecticide resistance in grain pests, including studies on genetic aspects of this resistance. On his way home from the Pest Infestation Control Laboratory at Slough, U.K., he has been visiting Russia and China to sample grain pests for insecticide resistance testing.

Dr. Michael Gonen, of the Stored Products Research Laboratory of the Israel Ministry of Agriculture, joins the Division in September for 15 months, to work on the effects of heat on stored grain insects.

The new Stored Grain Research Laboratory is to be formally opened on 24th August by the Minister of State for Science, the Hon. W.L. Morrison, M.P. The building, which has been constructed as a wing at the south-west end of the Division's main building, was built with funds provided by the Australian Wheat Board.

Australian National University

Ihor S. Misko, of the Department of Zoology, was recently awarded a Ph.D. for a thesis on immunological aspects of host reactions to parasites. He is now working in the John Curtin School of Medical Research in the university.

P. Ferrar

NEW SOUTH WALES:

The Australian Museum

John Dobunaba, from Bulolo, P.N.G., is spending some weeks in the Entomology and Invertebrate departments of the Museum. He is being trained in Museum techniques, and is being supported by the Department of Foreign Affairs. He will later be returning to Bulolo to continue work in Barry Gray's Department.

David McAlpine has returned to Sydney after a very successful overseas trip.

John Orrell, from Cairns, visited the Museum to discuss his observations on larval polymorphism in birdwing butterflies.

C.N. Smithers

N.S.W. Department of Agriculture, Rydalmere

Dr. E. Schicha and Mr. P.J. Walters are to be transferred to the Department of Agriculture's Research Station at Bathurst. They will concentrate on integrated control aspects of pome fruit insects in that area.

H.A. Rose

University of New England

Dr. Tony Watson (CSIRO, Division of Entomology, Canberra) recently spent a few days in the Zoology Department at the University. His talk on harvester termites, illustrated by an excellent colour film, was enjoyed by quite a large and varied audience of entomologists and other species of biologists. We saw little of him afterwards, as he and Tony O'Farrell immured themselves in the back of the Departmental museum with many drawers and boxes of Odonata. It is rumoured that they contemplate the almost suicidal proceeding of jointly attempting to rationalise a problem in odonate classification which has proved too recalcitrant for all concerned over a period of 100 years.

E.T. Giles

QUEENSLAND:

Southern Queensland

Dr. Angus Macqueen has recently arrived at the CSIRO Long Pocket Laboratories, Indooroopilly, to work on dung beetles. He has just completed a Ph.D. at Simon Fraser University, British Columbia, on the problems caused by cattle dung and its associated insects in the southern interior of British Columbia. Before going to Canada Gus worked near Gordonvale in north Queensland for the Bureau of Sugar Experiment Stations, studying pests of sugar cane.

Gus will be investigating the establishment of the dung beetles at present being released by CSIRO in many parts of Australia, and the effects they are having on speed of dung burial, breeding of flies, and so on. He will also be checking the extent to which predators of the beetles are reducing population densities in the field.

P. Ferrar

The Queensland Cabinet has decided that the National Mosquito Control Committee, established in 1943, be dissolved and that its functions be assumed by the Council of the Queensland Institute of Medical Research as from 1 July 1973. Dr. E.N. Marks was the Mosquito Control Committee's Senior Research Officer, attached to the Department of Entomology, University of Queensland, and supported by funds that came to the University from the State Health Department. As a consequence of Cabinet's decision, she has been transferred to the staff of the Queensland Institute of Medical Research as from 1 July with appointment as Principal Entomologist. By agreement with the University, until such time as accommodation and facilities can be provided at the Institute, she will continue her research in the Department of Entomology. This seems likely to be until the Institute moves to its new building scheduled for December 1974.

Visitors to the far north

April - May.

Dr. Grant Millor of Lismore spent two weeks at Mission Beach, a week in Cairns area and two weeks at Iron Range. He was joined by Ian Morhaus of Woodburn for the Iron Range part of his trip. Both were seeking Lepidoptera and apparently had fair success considering the poor weather conditions and their lack of transport and local knowledge.

May 26.

John d'Apice of Sydney staged in Cairns prior to making a trip to Darwin by etch, with stops at Iron Range and the Torres Straits Islands. He also was seeking Lepidoptera. He returned home by plane from Darwin.

I did not meet any of these collectors, but Allan Walford-Huggins had contact with all three.

J.G. Brooks

PAPUA NEW GUINEA:

Miss Joan Knowles, formerly of CSIRO Long Pocket Laboratories, Brisbane, joined D.A.S.F. in May as an entomologist. She is stationed at Popondetta.

Dr. J. Linsley Gressitt left P.N.G. for Hawaii late in May, but expects to return in August.

Dr. Eizi Momma of Hokkaido University and Dr. Haruo Takada of Sapporo University, spent a few days in P.N.G. in June collecting Drosophilidae as part of a South Pacific survey of the group. They had good results in the Port Moresby (Brown River) and Popondetta (Lejo) areas, and plan to visit New Britain in August on their return journey.

Dr. Errol Hassan resigned from D.A.S.F. after six years, first as Entomologist and later as Senior Entomologist at Popondetta, to take up a position at the Queensland Agricultural College, Lawes.

Prof. Kenneth P. Lamb, returned in July from sabbatical leave in the U.K.

T.L. Fenner

NEWS FROM AFFILIATED SOCIETIES

ENTOMOLOGICAL SOCIETY OF QUEENSLAND:

At the May meeting of the Society there was no address, and instead two CSIRO films, "Dung down Under" and "The Termite World" were screened. As usual, the June meeting took the form of a Notes and Exhibits evening, with an extensive range of topics being presented. A very interesting meeting.

The Society recently conducted an emblem competition as part of its 50th year activities. The winning design by Sybil Monteith featured the prized stag beetle *Phalacrognathus muelleri* in dorsal aspect.

The Jubilee Symposium of the Society is now entitled "Changing Patterns in Entomology". Fuller details are given in the green supplement enclosed with this News Bulletin.

In July Dr. David Spratt addressed the Society on his work involving tabanid flies as intermediate hosts of the nematode *Dirofilaria roemeri*, a parasite of Australian macropods.

The Society has recently established an Expert Committee on Mosquito Control with representatives from different institutions in and near Brisbane. It is planned that the Committee will keep a watchful eye on present and proposed biting fly control, and will advise the Council of the E.S.Q. on ways in which the Society might foster measures that are based on sound entomological principles which cause minimal environmental disturbance, and on ways in which measures not so based might be discouraged.

B. Cantrell

The Entomological Society of Australia (N.S.W.)

The June meeting of the Society was addressed by Dr. A.D. Clift, who spoke on "The Use of Artificial Diets for Mass Rearing of Insects". Many aspects of entomological research require large numbers of insects, and the use of artificial diets reduces the amount of work involved in rearing and decreases disease problems. Some insects are reared on artificial media because of objectionable qualities in the natural food, e.g. blowflies. Generally artificial diets are most successful with insects that have a wide host preference, but sometimes simple diets have been devised for host-specific insects, e.g., the codling moth. One of the simplest and most useful of artificial diets is Shorey's medium.

Following the usual custom no meeting was held in July.

From August onwards the Society will hold its meetings in the Australian Museum.

C.E. Chadwick

INSECT TRAPPING PROGRAMMES

The "News Bulletin" of November 1971 (Vol. 7, Pt. 4) included a questionnaire seeking information on insect trapping programmes maintained in all parts of Australia and in Papua New Guinea. It was planned to collate the information received in the form of a register of insect traps which would be of interest to many entomologists. The questions posed included the types of trap used, their locations and frequencies of operation, the kinds of insect recorded, and whether information derived from trapping would be made available to other entomologists on request.

Fifteen replies have now been received, and these cover some thirty trapping programmes. The majority of respondents indicated their willingness to provide data for enquirers, within the limitations imposed by the records they maintain and the availability of staff to compile the data sought.

An examination of the replies has shown that, because of great variation in the types of trap used, the frequency of operation and the data recorded, it is not possible to provide a concise tabulation of this information. In the list below, trapping localities are given, together with a brief indication of te types of trap used, and the major groups of insects recorded. The Secretary will be pleased to provide individual members with further details concerning particular trapping programmes, or to put them in touch with the persons conducting them. As some questionnaires were returned as early as late 1971, it should not be assumed that all the programmes listed remain in operation.

Queensland.- Light and emergence traps in various coastal localities: inter-tidal Ceratopogonidae, especially *Culicoides* spp.

New South Wales.- Light traps at Armidale and Coffs Harbour: Coleoptera, particularly Scarabaeidae. Light trap at Narrabri: Lepidoptera associated with cotton crops.

Australian Capital Territory.- Light traps: primarily Coleoptera.

Victoria.- Light and suction traps at Bundoora and Templestowe: Lepidoptera of economic importance.

South Australia.- Light trap near Gawler: Lepidoptera of economic importance.

Western Australia.- Light traps at Kununurra: mainly Lepidoptera of economic importance on cottom and sorghum. Pitfall traps in various localities in middle and eastern wheat belts, primarily for trapdoor and funnel web spiders. Light traps at Baker's Hill: pasture webworm. Light traps at Yanchep and Ludlow: forest insect pests (especially *Phoracantha* and Cossidae). Suction trap at Jandakot: small flying insects (many groups).

Papua New Guinea.- Extensive programmes involving light traps, Mason traps, bait and pitfall traps, and Moericke yellow water traps, used in monitoring the abundance of insects associated with economic crops and for collecting material for taxonomic research. Localities include Keravat, Bubia, Cape Hoskins (New Britain), Goroka, Mt. Hagen, Wau, Bulolo, Tapini, Popondetta, Sangara, Port Moresby areas.

FISH AS A "LURE" FOR COLEOPTERA. PART II.

(Editor's Notes: An article on this subject by Mr. Brooks appeared in Bulletin 7 (1) pp. 17-18 (February 1971). As many newer members will not possess this Bulletin I am reprinting below the introductory part of the article. I can supply a copy of the whole article to anyone who is particularly interested.

The last four Scarabaeidae listed below have been worked taxonomically by Dr. E.G. Matthews in a revision currently in press in the *Australian Journal of Zoology Supplement* Series.)

On one of my trips to Mount Spec, Paluma, N.Qld., I came to a picnic spot where someone had discarded the backbone of a fish. On turning it over I observed a number of small beetles, and this prompted me to experiment on future trips.

Backbones from filleted mackerel were selected as they are fairly broad and moderately tough. Small areas in rainforest and open forest are cleared of debris, and the fish slabs are anchored with gauge 8 wire loops and covered with small tree branches. A little insect life is present within a short time, but the best results are obtained from 48 hours onwards after the setting the "lures".

Rainforest and near-rainforest areas have been more productive, though open forest areas with a moderate amount of shade have also given satisfactory results.

The following additional Coleoptera from fish "lures" are recorded. Except where otherwise stated, Mount Spec (Paluma, Q.) is the locality. It has so far been the best area for this type of collecting, though other rainforest and open forest areas may prove just as productive if worked consistently. There must be a similarity between fish and fungi, as many of the species are associated with both.

Scarabaeidae

Onthophagus capitosus Har. (24 miles S. Musgrave Stn., Q.)

Onthophagus picipennis Hope (24 miles S. Musgrave Stn., Q.)

Onthophagus quadripustulatus Fab.

Onthophagus rubrimaculatus Macl. (Cooktown)

Lepanus sp. (not *Panelus* sp. as suggested Part I)

Temnoplectron sp.

Amphistomus sp.

Cephalodesmius cornutus Macl.

Trogidae

Trox squamosus Macl.

Carabidae

Carenum opacicolle Sloane

Trichosternus nudipes Darl.

Nitidulidae

Lasiodactylus stelidotoides Oll.

Staphylinidae

Xantholinus orthodoxus Oll. (Cooktown)

I took a quantity of mackerel backbones with me on my trip to Iron Range in 1971, but the results were very disappointing as all the "lures" were immediately taken over by swarms of green tree ants (*Oecophylla smaragdina*). On the day following the setting, one lure produced several *Actinus macleayi* Oll. (Staphylinidae) and several days after setting a number of *Coptodactyla glabricollis* Hope (Scarabaeidae) were in attendance at another patch of lures. A poor result for seven days' work.

J.G. Brooks

INTERNATIONAL STORED-PRODUCT ENTOMOLOGY CONFERENCE

An announcement has been made of the forthcoming First International Working Conference on Stored-Product Entomology, to be held in Savannah, Georgia, U.S.A., on October 7-11, 1974. The conference will cover all phases of Stored-Product Entomology and will include symposia, panel discussions, and submitted papers. Facilities will be available for informal get-togethers as they are required. A proceedings will be published following the meeting.

Anyone desiring further information should contact:

Organizers,
Working Conference on Stored-Product Entomology,
c/o Stored-Product Insects Res. & Dev. Lab.,
ARS-USDA,
P.O. Box 5125,
SAVANNAH, Georgia, 31403. U.S.A.

REQUEST FOR INFORMATION

I should be most grateful to any member who could provide locality records for the eucalypt leaf feeding chrysomelid *Paropsis charybdis* Stål (previously and incorrectly known as *P. dilatata* Er.).

This species was introduced to New Zealand some 50 years ago, and is a major pest there of planted eucalypts. Later this year, New Zealand Forest Products Ltd. plans to send a forest entomologist to Australia to search for *P. charybdis*, and to look into the possibility of rearing one or more of its insect parasites for desptach to New Zealand.

There are not many specimens of *P. charybdis* in Australian museum collections, and most of those seen when I examined collections of *Paropsis* spp. some years ago were old specimens and not adequately labelled. It seems likely that the species occurs mainly in the south coastal areas of New South Wales, eastern Victoria, and possibly in northern Tasmania.

Accurate locality records for this insect would greatly assist the visiting entomologist to define areas in which to concentrate his search.

P.B. Carne
Division of Entomology,
CSIRO, P.O. Box 1700,
CANBERRA CITY, A.C.T. 2601.

COLLECTING LAMPS - A WARNING

A problem has arisen for entomologists using mercury vapour lamps for the collection of insects.

From our point of view these lamps fall into two categories; the high pressure mercury vapour lamps which require a choke to operate them, and the "Blended" lamps with a tungsten filament as well as a mercury vapour arc which have the great advantage that they can be plugged directly into the mains without a choke.

The problem mainly concerns these blended lamps. They *used to* emit light in the long-wave ultra-violet portion of the spectrum and it was for this reason that they were attractive to many insects.

Over the last year the manufacturers have changed the internal phosphor coating of these lamps and the "Blended" lamps now on the market do not emit *any* light in the long-wave-ultra-violet portion of the spectrum. Although they may still attract some insects, they do not function as they used to, as the writer found to his cost on a recent survey: two lamps, an old and a new, were being used at the one time and the difference was quite striking.

The same phosphor coating is also being used in the high pressure lamps but these, for some reason, still emit some light in the long-wave-ultra-violet portion of the spectrum, so they still attract insects though less efficiently than they did.

Some manufacturers can still supply (from existing stocks only, I presume) high pressure mercury vapour lamps with clear glass envelopes. These are most effective and were originally recommended for the Robinson Light Trap; however these lamps should only be used in traps, as they emit short-wave-ultra-violet light which can cause serious eye damage and sunburn with any prolonged exposure.

At the time of writing no answer has yet been found to the replacement of the "Blended" lamps.

M.S. Upton

BIOLOGICAL CONTROL?

A recent issue of the Bulletin of the Entomological Society of Canada quotes the following item from the news agency Agence France Presse:

"Freetown, May 7 - The malaria-carrying mosquito was honoured in Sierra Leone today for making the country the "white man's grave" in the past and preventing Europeans from settling here.

"The Order of the Mosquito has been created to reward acts of military or civil gallantry, the Presidents' Office announces."

WHITE SPOTS ON COVERS

If there is a white spot in the top right hand corner of your News Bulletin you have still not paid your subscription for 1973. Please send $10 as soon as possible to the Treasurer, Dr. R.L. Kitching, Division of Entomology, CSIRO, P.O. Box 1700, Canberra City, A.C.T. 2601.

OCCASIONAL PUBLICATIONS
OF THE AUSTRALIAN ENTOMOLOGICAL SOCIETY

HANDBOOK NO. 1

"Methods of Collection and Preservation of Insects"

by

K.R. Norris

CSIRO Division of Entomology

This Handbook is indispensable for all, whether amateur, professional or student, who collect insects.

40 pp. Price: $A1.00

MISCELLANEOUS PUBLICATION NO. 1

"The Entomology of Citrus in New South Wales"
(W.W. Froggatt Memorial Lecture)

by

P.C. Hely

N.S.W. Department of Agriculture.

20 pp. Price: $A1.00

MISCELLANEOUS PUBLICATION NO. 2

"Directory of Australian Entomology"

Lists professional and non-professional entomologists, their fields of interest and places of employment.

51 pp. Price: $A1.00 (50c. to Society members).

The following four pages were inserted into this issue as two loose documents

THE AUSTRALIAN ENTOMOLOGICAL SOCIETY

BALANCE SHEET AS AT 30TH JUNE, 1973.

1972				1973
		Accumulated Funds		
16116		Balance 1st July, 1972		16849
		Add: Surplus for Year		
	443	Publication Acc.	516	
733	290	General Account	3014	3530
16849				20379
		Current Liabilities		
41		Subscriptions in Advance	64	
1316		Sundry Creditors	1725	1789
$18206				$22168

1972				1973
	Fixed Assets			
23	Furniture & Equipment - At cost less depreciation			20
	Current Assets			
	Cash at Bank			
1214	General Account	1576		
2168	Publications Account	3429		
1086	International Congress - Account			
418	Special Purpose & Sustaining Associates Acc.	945	5950	
5500	Interest Bearing Deposit		9500	
34	Cash on Hand		68	
5881	Stocks on Hand - At cost		5155	
750	Subscriptions in Arrears		891	
363	Prepaid Congress Expenses		-	
769	Sundry Debtors		584	22148
$18206				$22168

AUDITORS REPORT

We have examined the books and records of the Australian Entomological Society for the year ended 30th June, 1973 and report that in our opinion the attached Balance Sheet and Income and Expenditure Accounts are properly drawn up so as to give a true and fair view of the state of the Society's affairs as at 30th June, 1973, and the results of its operations for the year then ended.

DUESBURY JOHNSTON AND MARKS
Chartered Accountants

CANBERRA 25th July, 1973.

Supplement to Australian Entomological Society News Bulletin Vol. 9 No. 3 August 1973.

THE AUSTRALIAN ENTOMOLOGICAL SOCIETY

PUBLICATIONS INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30TH JUNE, 1973.

1972			1973	1972			1973
	Opening Stocks :			4584	Subscriptions Received		5297
128	Handbooks	79		2367	Sales		3737
256	Miscellaneous Publications	235		205	Interest Received		280
					Closing Stocks:		
5187	Journals	5567	5881	79	Handbooks	16	
6451	Printing costs		7842	235	Miscellaneous Publications	107	
572	Stationery & Postages		230	5567	Journals	5032	5155
443	Surplus for Year		516				
$13037			$14469	$13037			$14469

GENERAL INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30TH JUNE, 1973.

1972		1973	1972		1973
130	Audit & Accountancy Fees	170	1911	Subscriptions Received	1660
602	Stationery and Postages	406	174	Interest received	108
100	Legal Expenses on Incorporation	-	-	4th International Congress - Surplus	2456
826	News Bulletin	605			
100	Student Prize	-			
13	Filing Fees	-			
21	Sundry Expenses	26			
3	Depreciation	3			
290	Surplus for Year	3014			
$2085		$4224			$4224

PROGRAMME

9.00-9.05 **President's Welcome.** *B.F. Stone, M.Sc.,Ph.D.,F.R.A.C.I.,* CSIRO, Division of Entomology, Long Pocket Laboratories, Brisbane.

9.05-9.15 **Official Opening.** *Sir Alan Summerville, D.Sc.,LL.D.,* Chairman, Australian Sugar Board.

9.15-9.20 **President's Thanks**

9.20-11.10 IN RETROSPECT

Chairman: *W.H. Haseler, M.Sc.,* Biological Section, Department of Lands, Alan Fletcher Research Station, Brisbane.

The Insects and the Entomologists - *I.M. Mackerras, D.Sc.,M.B.,Ch.M.,F.R.A.C.P., M.C.P.A., F.A.A.,* CSIRO Division of Entomology, Canberra.

Entomology and Plants - *T. Passlow, M.Sc.,* Entomology Branch, Department of Primary Industries, Toowoomba.

Entomology and Animals - *R.H. Wharton, M.Sc.,Ph.D.,F.A.A.,* CSIRO, Division of Entomology, Long Pocket Laboratories, Brisbane.

Morning Tea

11.30-1.00 THE ENTOMOLOGIST

Chairman: *T.E. Woodward, M.Sc.,Ph.D., D.I.C.,* Department of Entomology, University of Queensland.

His formal training - *G.H.S. Hooper, M.Sc.,Ph.D.,* Department of Entomology, University of Queensland.

What is expected of him? *G.W.Saunders D.Agr.Sc.,* Fauna Conservation Branch, Department of Primary Industries, Brisbane.

Does training meet expectations? *I.M. Cook, M.Sc.,* CSIRO Division of Entomology, Rockhampton.

Lunch

2.20-3.45 CURRENT DEVELOPMENTS

Chairman: *E.J.Reye, M.B.,B.S.,* Department of Entomology, University of Queensland.

Pest Control in Agriculture and its Effects - *M. Bengston, M.Sc.,Ph.D.,* Entomology Branch, Department of Primary Industries, Brisbane.

Research on Arthropod Pests of Man and Livestock - *H. Standfast. B.Sc.,* CSIRO Division of Animal Health, Long Pocket Laboratories, Brisbane.

Afternoon Tea

4.05-5.00 LOOKING FORWARD

Chairman: *Elizabeth N. Marks. M.Sc., Ph.D.,* Department of Entomology, University of Queensland.

What of the next fifty years? - *Professor D.S. Kettle, D.Sc.,F.I.Biol.,* Department of Entomology, University of Queensland.

7.15 PRE DINNER DRINKS

8.00 JUBILEE DINNER

PROCEEDINGS

This Symposium will deal largely with insects and acarines of the north eastern part of Australia and with the entomologists who studied them, but the "changing patterns" revealed may well be similar to those of other regions. As changes emerged in this part of the continent they helped to shape Australian entomology and certainly provided a stimulus for the formation of a national entomological society.

Therefore, it is anticipated that the proceedings of the Symposium will interest many entologists not able to attend; copies (Jubilee Publication) may be ordered on the Registration Form.

The Symposium Symbol represents the pattern traced by the tip of an insect wing during forward flight.

CHANGING PATTERNS IN ENTOMOLOGY

JUBILEE SYMPOSIUM OF THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND

SEPTEMBER 22, 1973

The Society invites you
to its

SYMPOSIUM
at
University of Queensland
and
JUBILEE DINNER
at
Boulevard Tropical Gardens
Brisbane

ENTOMOLOGICAL SOCIETY OF QUEENSLAND

REGISTRATION FORM

Please complete in BLOCK LETTERS and forward as soon as possible but no later than 12th September to:

Mr. T. McRae,
Department of Entomology,
University of Queensland,
St. Lucia, Queensland 4067

Prof.
Dr.
NAME Mr.......................................
Mrs.
Miss

ORGANISATION.......................................

....

ADDRESS (for correspondence).......................................

....

....Postcode..........

		Number Persons	Cost
Registration fee,			
Member of ESQ	@$2.50	....	....
or non member of ESQ	@$3.50	....	....
or student member	@$1.00	....	....
or student non member	@$1.50	....	....
Lunch at Staff Club (pay direct)		....	xxxx
Jubilee Dinner	@$6.00	....	....
Jubilee Publication (non-attenders or extra copies)	@$2.50	....	....

Total ....

A cheque for $....................is enclosed.

SIGNATURE.......................................

DATE.......................................

JUBILEE CELEBRATIONS

OF THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND

SATURDAY, SEPTEMBER 22ND 1973

The Society's Jubilee Symposium and Jubilee Dinner are open to members of the Society and their friends or associates and to interested members of the general public. Members of kindred organisations are especially welcome.

Location. The Symposium will be held in the Physiology Lecture Room 2 at the University of Queensland, St. Lucia, Brisbane. The Dinner will be held at the Boulevard Tropical Gardens, 284 Witton Road, Indooroopilly.

Lunch. A block booking will be made for a barbecue lunch at the University Staff Club at a cost of approximately 80 cents per person. This is payable directly to the Staff Club but to allow adequate catering, members are asked to indicate their intention on the Registration Form.

Registration Fee. The registration fee entitles subscribers to a copy of the Jubilee Publication and to morning and afternoon tea on the day of the symposium.

Taxation Concession. The Taxation Office advises that costs of attendance may be allowable deductions for taxation purposes where a person is professionally employed in entomology.

Jubilee Publication. The Society will publish a permanent record of its Jubilee Celebrations. The publication will include the proceedings of the Symposium and the opening of the "Insects and Man" exhibition together with a history of the Society and general notes and photographs of the Jubilee activities. It will comprise approximately 64 pages and will be published towards the end of 1973 in the form of an Occasional Publication of the Australian Entomological Society. Additional copies are $2.50 including postage.

SYMPOSIUM - CHANGING PATTERNS IN ENTOMOLOGY

Insects have always had a significant impact on man and his environment. Profound changes are occurring in entomology and the Jubilee Symposium will examine some of these changes.

At the time of formation of the Society there were more professional entomologists in Queensland than in the rest of Australia and the University of Queensland already had a distinguished record of applied and systematic entomological research. Both professional and amateur entomologists were interested in insects as animals, in their biology, and in recording the fauna.

These studies have continued but recognition of the increasing complexities of controlling insect pests has led to employment of a range of specialists capable of manipulating insect populations. Participants at an entomological meeting nowadays may include biochemists, chemists, ecologists, geneticists, parasitologists, physiologists, mathematicians, medical graduates and veterinarians as well as entomologists. Insects have also provided science with convenient biological material for research and teaching.

Substantial contributions have been made, nationally and internationally, by investigators in Queensland. The most spectacular agricultural success has been the control of prickly pear by the introduction of the moth *Cactoblastis cactorum*. In medical and veterinary entomology, pioneering studies were made on the transmission of such diseases as filariasis, dengue fever, Q fever and babesiosis.

Pesticides have enabled man to control pest populations but with their use have come the problems of residues and resistance and improved techniques are urgently required. The uses of sex pheromones and attractants or irradiation and genetic manipulation are some of the more intriguing current studies.

Supplement to AES/ESQ News Bulletin
August 1973.